



Farmer experimentation: a challenge to all!

Henri Hocdé, David Meneses, and Byron Miranda

PRRIAG or the Regional Program for Reinforcing Agronomic Research on Basic Grains in Central America was an European Union-funded regional collaborative project between EU and the six countries of Central America (1991-1999). Its mandate was to improve the efficiency of the national research and extension systems and make them more responsive to farmers' needs.

It built on an approach known as 'farmer experimenter' (FE) in order to strengthen farmers' capacity to investigate and innovate at the local level, and to enhance their capacity to dialogue with researchers and extension agents. In this way they could create their own specific space and role in the research-extension-farmer chain. By strengthening farmers' capacity to produce, identify, obtain, modify, adapt, share and use information, agricultural technologies can be developed and spread.

PRIAG had teams (researchers and extension workers) in Panama, Guatemala, El Salvador, Nicaragua, Honduras and Costa Rica. Annual work plans were negotiated between farmer experimenters (FEs), formal researchers and extension agents and PRIAG also helped farmers organise, communicate and facilitate their experimentation. For PRIAG, farmer experimentation is a combination between experimentation, communication and organisation.

The first condition to secure this goal is to establish a climate of confidence between FEs and professionals and make it possible for farmers to speak for themselves. PRIAG devoted considerable atten-

tion to ensuring there was effective communication among FEs. This articles demonstrates this development in a Central American perspective and goes on to discuss the scaling-up of the process.

Farmers' testimonies

For several years, the Ministry of Agriculture (MAG), Costa Rica assisted by PRIAG has promoted a "Farmer Experimenter" project in two regions, Brunca and Huetar. In 1998, it decided to publish on this process both to reveal farmers' innovating skills and to show how the extension agents involved were willing to change their working methods and to see farmers as producers of technological innovation and agents of dissemination.

With this in mind, it was proposed to draw up a document that would contain the technical and economic results of farmers' experimentation and their views on their role as FEs. The important thing was to give them a chance to speak for themselves.

Field agents in the lead

The task was not entrusted to researchers from universities or foreign research centres. Despite their limited writing skills, grassroots extension agents working directly with the FEs were given the task.

In both regions, local MAG staff set up preparatory 2-day workshop attended by 20 field agents from the region and some interested researchers. Participants began by discussing the implications of the task before them, discussed how they could

best help the farmers in their area to write up their own testimonies as FEs, and explored how this should be organised. They all agreed that the final text should be short -between 4 and 6 pages- illustrated, and pleasant to read. Each testimony should have the same structure, but individual style and creativity would be encouraged. The PRIAG facilitator proposed a structure for the testimonies. Field agents set guidelines for interviews and the order of the final text. These focused on four aspects:

My life. Who are we, my family and I? Where did we come from? Why and how did I become involved in experimentation?

My experiments. What am I proving? How did I design my experiments? What do I observe and measure?

The benefits of experimentation. What did my family, association and community gain from being a FE?

Dissemination of results. What would I recommend to other FEs from my area, my country and Central America?

Not an easy task

Each agent chose one or two farmer experimenters from their own area. They were free to choose their own way of obtaining information from the farmers in order to document experience. Some made long interviews, others made three or four visits and tape recorders were also used. Some presented the guidelines, explained the reason for the work and left the tape recorder with the farmer until the recording was ready for transcription. They used their own creativity to decide on the most appropriate method. The work aroused considerable interest among most FEs. The confidence established over the years between the farmers and the field agents was a crucial factor for success.

The field agents were enthusiastic about the task, but faced many difficulties. They realised that it was not enough simply to gather information during an initial interview. They had to complete and enhance farmers' statements, refresh farmers' memories, ask relevant questions, find the best illustrations, identify the titles that would most appeal to readers and highlight the main ideas. Most of the field agents confessed that this was far from an easy task.

Farmers found it fascinating to talk about their origins and were very voluble in this respect. Obviously, it was difficult for them to analyse their own experiments and the future of these initiatives. The field agents were amazed to learn what farmers thought about them and to see it written forthrightly in black and white. "Previously we had no interest in technical advisors, we thought they were lazy and that their experiments were a waste of time ... now we understand the meaning of the experiments and have no desire to see our advisors go away."

My life

FEs describe themselves as humble men and women working in adverse situations, risking their fragile economies, but eager to move forward to create a new and better future. Some regard themselves simply as curious, experimenting observers who talk about their observations and in this way get ideas for future experiments. Others see themselves as being disseminators or as being more interested in organising farmer experiments.

The bulk of these testimonies show clearly that the farmers live a very hard life. They relate how farming was introduced on this young frontier less than 50 years ago. They tell of migration, the number of farms they farmers went through before they established themselves on their present holding, the impressive size of their families (as many as 19 siblings) and the desolate state of the roads. In just a few pages readers get a clear picture of the true circumstances in which farmers live and work and can be brought close to the way farmers feel. Technical documents, reports and socioeconomic studies are unable to provide this sense of immediacy.

Through these testimonies, one realises that farmer experimentation is deeply rooted in the daily struggles of small-scale farmers. They reflect the reality of all FEs in Central America, and confirm the latest document published by the *Campesino a Campesino* Programme in Nicaragua (UNAG, 1999).

My experiments

It is evident that, in the eyes of the FEs, farmers' experiments go beyond setting up trial plots and studying and interpreting concrete results. The FEs stress the process as a whole and the impact it generates: creating an atmosphere of confidence between each other, generating a community movement, even though they still do not know where it will lead. "FEs have become personalities", said one. They have acquired tremendous self-esteem and fuller awareness. They insist on the fact that they can now teach their neighbours and their children. They feel useful and the meetings, workshops and exchanges have broken their isolation.

Finally equal

The climate of confidence also had a positive effect on MAG field staff, researchers and others involved. Farmers who had previously tried to avoid them because they felt they were wasting their time now extended their friendship and sought their help. Relationships were now 100% better.

The oddest thing was the difficulties encountered in launching the task of getting testimonies. The approach provoked amazement. The testimonies were a sharp rebuke for those who felt there was no need to interview farmers because field agents had been working in this area for the past 10-15 years. They proved the farmers' force, conviction, faith and high sense of commitment to building a better world. They also showed the limits and bias in the knowledge of many MAG staff.

PRIAG financed the publication of some of these testimonies and delivered them to the farmers personally. The farmers use these documents as instruments to encourage others to accept the challenge to innovate. They had to try and find solutions to their problems themselves because they could not expect the solutions they needed to come from outside. They were proud to see their names and photographs in a book and to feel that, at long last, they were on an equal footing with the researchers who visited their farms.

Communicating innovation

Exchanges between FEs, local, regional and national meetings, fairs, congresses for FEs, written or visual testimonies (photos, TV, videos), regularly published magazines, local radio programmes, calendars, almanacs, T-shirts, caps and specific training workshops reflect the unlimited types of actions being invented and implemented in Central America to disseminate information on farmer innovation. There are many interesting examples.

Radio broadcasting

Panamanian FEs got involved in a radio programme in which they transmitted the results of their experiments themselves. In addition to their role as FEs, some of them

have taken on the responsibility - together with MAG agents - of becoming radio correspondents. Equipped with a portable tape-recorder provided by PRIAG, they record their stories and send them to the main town in the region for the Sunday radio programme.

Filming own experiments

Farmers became involved in producing a video of their experiences. The idea originated in the Baja Verapaz region of Guatemala, where a group of 60 FEs attending a training workshop had just watched a technical film. When it came to analysing the film, several of them diplomatically stressed the importance of what they had just seen, but expressed concern about always having to watch the experiences of others. They suggested talking about their own experiences as FEs. They were then invited to answer the following question: "What images of your own activities as FEs would you like to see on the screen? Explain your reasons and argue your point." This was a long task that required several sessions, but a script was produced, the desired pictures were decided upon and filming dates were set. This resulted in the videos mentioned below.

Publications

In Nicaragua, many valuable experiences regarding the work of FEs are worth recording and making available to others. The monthly magazine *Enlace*, published by SIMAS (Central American Information Service on Sustainable Agriculture), has been reporting the history of one or several innovations in each of its issues since 1990. SIMAS also made up a "methodological basket" and distributed the publication to a large number of organisations and peasant outreach workers in the country. Its objective was to offer as many of the methodologies used by various Central American outreach workers as possible in the interests of promoting farmer experimentation.

Exchange fair

In 1997, the *Campesino a Campesino* Programme of UNAG in Nicaragua organised an "experience-exchange market" involving farmers and indigenous peoples in agricultural frontier areas. This was a meeting point for 140 innovating farmers from Central America. For two days, the participants displayed their work, using panels of photographs they had taken themselves. Each participant offered and asked for information as if they were actually in the main marketplace.

Television

Groups of FEs supported by the NGO Unicam in northern Nicaragua are also great believers in photographs seeing them as a practical and inexpensive way of showing their work to neighbours. As they become more involved in communicating



their innovating activities, many farmers lose their fear of speaking in public and, every so often, they surprise others by appearing on television in Esteli, the region's capital city. *"Are these farmers really capable of standing in front of 150 people and talking about their experiences, using numbers, drawings and everything?"*

Farmers' diary

For the past few years, the National Extension Bureau of the MAG in Costa Rica has been publishing and distributing a type of log-book to farmers. Known as "My farm book", it enables farmers to keep daily records of their activities and to calculate their costs at the end of each month. Inserts with stories of innovative projects undertaken by farmers in different regions are interspersed throughout the book.

Ownership essential

Documenting and distributing information is one thing, but the use made of these documents is something else. A well-worn photograph much used by the innovating farmer is worth much more than a video of

team of farmers and advisors set out to identify FEs, explore their innovating skills and to find out about their experiments. The team then went on to evaluate the impact of these innovations and experiments on production costs, pesticide use and environmental and soil degradation. Workshops were held for FEs and technical advisors. Experiments, results and experiences were discussed and plans made for further experimentation.

To broaden the scope of farmer experimentation, the working models were put into practice throughout the region Huetar Norte. The First Regional Congress for Innovating Farmers in the Huetar Norte Region was organised in August 1999. At the end of the event, the eighty participant FEs elected a regional, legal and permanent committee with the clear mandate to reinforce the research capacity of farmer organisations. It calls itself the Regional Committee of FEs of the Northern Zone (-CRAEZN). The Committee comprises five representatives of farmer organisations and two agronomists (one representative from the public sector (MAG), and one from the NGOs). An advisor from CIRAD supports the group.

charge of research and technology development, it focuses on farmer research methods and research financing controlled by producers' organisations rather than agricultural support services. Consequently, it is supposed to get more capacity to solve problems and influence public policies.

A challenge for all!

This new situation poses a challenge for researchers and technical advisors because it demands a radical change in their working methods. It means they will have to be more creative, communicative, tolerant, patient and capable of listening and sharing information and knowledge and apply these same values in drawing up and designing projects and realising their joint ideas and dreams. Field agents and researchers have to become facilitators committed to the educational process, combining the knowledge and experience of farmers and field agents in a *learning dialogue*. This involves moving from a linear pattern of communication to a relationship of mutual cooperation where the contributions of each actor in the knowledge system are clearly acknowledged.



A clearly defined mandate

The following mandate was given to CRAEZN:

- promote the creation of a Technical Experimentation Committee (comprised of FEs) in grassroots organisations
- negotiate and obtain economic and other resources in order to encourage and support the experiments conducted by farmer organisations, and create sustainable self-financing mechanisms to improve farmers' experimentation programme
- design projects that combine farmer experimentation with agro-industries and other economic activities
- provide training on farmer experimentation to farmers and agronomists
- organise the negotiation, collection, processing, management and dissemination of information on farmer experimentation
- promote the exchange of experiences between producer organisations through, e.g., discussion fora, field trips and local, regional and national congresses
- identify all farmers who are conducting experiments.

A significant step forward

Although this new initiative can be considered a continuation of other activities carried out in Costa Rica in the last decade, it is a significant step forward in qualitative terms. First of all, it was designed by the farmers themselves, representatives of producers' organisations and experts from the public and NGO sectors of the Huetar region. Second, in order to put farmers in

Henri Hocdé, CIRAD, France, former member of the Executive Bureau of the PRIAG Programme in Central America. 147, rue du Bosquet, 34 980 Saint Gely du Fesc, France. Email: Henri.hocde@cirad.fr
David Meneses, Regional Research Coordinator. Regional Agricultural Office of Huetar Norte, Costa Rica (investiga@norte.infoagro.go.cr)
Byron Miranda, Regional Coordinator of the IICA-Holland/LADERAS Project, El Salvador. (laderas@es.com.sv)

References, all in Spanish

- CRAEZN. 2000. **Producers' organisations and management of innovation processes**. Project document 80 pages Huetar Norte Region, Costa Rica.
- Hocdé H. 1997. **Guidelines for drafting the testimonies of experimenting farmers**. Internal PRIAG document.
- Hocdé H et al. (in press). **Farmer exchanges: beyond the frontiers... Let us become futurists!** San Jose: IICA-CIRAD.
- MAG 1998. **"And ... experimenting-farmers reveal their experiments": the experience of William Berrocal Retana**. Upalá, Costa Rica.
- MAG Costa Rica. 1999. **Minutes of the First Congress of Experimenting Farmers of the Huetar Norte Region, 3-5 August 1999**.
- Miranda B. 1999. **Open institutional systems for the sustainable development of Central American hillsides**. San Salvador: EDICPSA.
- PRIAG. 1999. **"We are not afraid of change": testimony of Alexis Bermúdez**. Pejivaye, Costa Rica.
- PRIAG. 1999. **"The birth and death of a farmer": testimony of Marco Mena**. Pejivaye, Costa Rica.
- UNAG. 1999. **Farmer experimentation: more than a simple trial plot**. Managua Nicaragua.

Videos, all in Spanish

- PRIAG. 1997. **Experiments based on needs: a history of farmer experimenters in Baja Verapaz**. Guatemala. 40 min.
- PRIAG. 1997. **Sow less, harvest more!!! A history of farmer experimenters in Arco Seco**. Panama. 44 min.
- PRIAG. 1997. **Hillsides, producer associations and experimentation: a history of farmer experimenters in Brunca**. Costa-Rica. Part I: 24 min.; Part II: 34 min.
- PRIAG. 1997. **"Invent! Invent! Invent!" A history of farmer experimenters in Upala**. Costa Rica. 40 min.

impressive quality that is confined to an air-conditioned room, a thesis containing congratulations from the awarding committee or a published article shelved by readers. The important thing is for innovators to do things for themselves and to be able to boast about their actions: *"I took these photos, I showed the video of our experience, I distributed primers, I handed out our testimonies..."* and so on. Ownership is an essential part the sharing, experimentation and communication that characterised all farmer innovation activities.

Broadening the process

In 1994, the Huetar Norte Regional Office of the Ministry of Agriculture and Livestock (MAG), assisted by PRIAG, introduced its technical advisors to a new working method with the aim of improving services and establishing closer relationship between advisors and farmers. A